

IN THE CLAIMS

1-21. (canceled)

22. (currently amended) A method for a seamless display and analysis of dual resolution image data, said method comprising:

reviewing image data of an object at low-resolution low-resolution;

performing a volumetric analysis of at least one feature of interest in the ~~low resolution~~ low-resolution image data;

substituting high-resolution image data of the at least one feature of interest for the analyzed ~~low resolution~~ low-resolution image data without operator intervention;

analyzing the high-resolution image data; [[and]]

linking the ~~low-resolution~~ low-resolution image data to the ~~high-resolution data to~~ facilitate seamlessly high-resolution image data;

displaying a volume rendering of the ~~low-resolution data and~~ low-resolution image data;

displaying analysis results of the high-resolution data in a single display image data;  
and

seamlessly toggling between a volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

23. (currently amended) A method in accordance with Claim 22 ~~wherein an area in an object in which the high-resolution data represents is selected based on results of a CAD algorithm~~ further comprising selecting an area in the object represented by the high-resolution image data using a CAD algorithm.

24. (currently amended) A method in accordance with Claim 22 wherein the ~~high resolution~~ high-resolution image data is present for only the features of interest identified by a CAD algorithm.

25. (currently amended) A method in accordance with Claim 22 further comprising obtaining ~~high-resolution~~ high-resolution image data representative of an area in an object for which ~~high-resolution~~ high-resolution image data has not been obtained.

26-39. (canceled)

40. (currently amended) A computer program embodied on a computer readable medium for acquiring medical image data, the computer program comprising: configured to:

~~a computer-readable medium; and~~

~~a computer program stored on the medium and including routines for:~~

~~receiving low resolution~~ receive low-resolution image data;

~~performing~~ perform a volumetric analysis of at least one feature of interest in the ~~low resolution~~ low-resolution image data;

~~substituting~~ substitute high-resolution image data for analyzed ~~low-resolution~~ low-resolution image data without operator intervention;

~~analyzing~~ analyze the high-resolution image data; [[and]]

~~linking~~ link the ~~low-resolution~~ low-resolution image data to the high-resolution data to facilitate seamlessly high-resolution image data;

~~displaying~~ display a volume rendering of the ~~low-resolution data and~~ low-resolution image data;

display analysis results of the ~~high-resolution data in a single display~~ image data; and

seamlessly toggle between the volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

41. (currently amended) A computer program in accordance with Claim 40 ~~wherein an area in an object in which the high-resolution data represents is selected based on results of a CAD algorithm~~ further configured to select an area in the object represented by the high-resolution image data using a CAD algorithm.

42. (currently amended) A computer program in accordance with Claim 40 ~~wherein the high-resolution~~ further configured to present high-resolution data ~~is present for only the features of interest identified by a CAD algorithm.~~

43. (currently amended) A computer program in accordance with Claim 40 ~~further comprising a routine for obtaining high-resolution~~ configured to obtain high-resolution data representative of an area in an object for which high-resolution high-resolution data has not been obtained.

44. (currently amended) An imaging system comprising:

a first image data acquisition system configured to acquire medical images; and

a computer coupled to the image data acquisition system and configured to:

receive ~~low-resolution~~ low-resolution image data;

perform a volumetric analysis of at least one feature of interest in the ~~low-resolution~~ low-resolution image data;

substitute high-resolution image data for the analyzed ~~low-resolution~~ low-resolution image data without operator intervention;

analyze the high-resolution image data; ~~[[and]]~~

link the ~~low-resolution~~ low-resolution image data to the ~~high-resolution data to~~ facilitate seamlessly high-resolution image data;

~~displaying~~ display a volume rendering of the ~~low-resolution data and~~ low-resolution image data;

display analysis results of the high-resolution data in a single display image data; and

seamlessly toggle between the volume rendering of the low-resolution image data and the analysis results of the high-resolution image data within a single display.

45. (currently amended) A system in accordance with Claim 44 ~~wherein an area in an object in which the high-resolution data represents is selected based on results of a CAD algorithm~~ configured to select an area in the object is represented by the high-resolution image data using a CAD algorithm.

46. (currently amended) A system in accordance with Claim 44 wherein the ~~high resolution~~ high-resolution image data is present for only the features of interest identified by a CAD algorithm.

47. (currently amended) A system in accordance with Claim 44 further comprising a routine for obtaining ~~high-resolution~~ high-resolution image data representative of an area in an object for which ~~high-resolution~~ high-resolution image data has not been obtained.